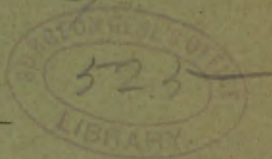


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HOSPITALS FOR THE INSANE—
THEIR SCOPE AND DESIGN.

BY EDWARD F. WELLS, M.D.
CHICAGO.

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HOSPITALS FOR THE INSANE—THEIR SCOPE AND DESIGN.

Shall the State have the custody of all its insane, or shall certain classes be relegated to county care? Shall the State care for the acute and the chronic insane separately or shall the hospital and the asylum be combined in one institution? Shall employment, especially agricultural, be afforded the patients, and if so to what extent? Should epileptics be received into insane hospitals or should they be cared for in a separate institution? Should any class of the insane be "boarded out," as practiced at Gheel, in Scotland and in Massachusetts? What should be the scope and design of the modern institution for the insane? These are questions of perennial and engrossing interest to the social economist, the legislator, the executives of our States and to the public at large, and they will be considered, with especial reference to the present status in Illinois, as fully as the limits of this paper will allow.

STATE VERSUS COUNTY CARE.

Every person adjudged insane and requiring other than family care—acute or chronic, curable or incurable—should be under the control of the State. This is in the line of the opinions expressed by almost every one who has given the subject any special consideration. This entire ground has been so often gone over that another review may well be omitted and attention will only be asked to a limited field.

In the Report of the Board of State Commissioners of Public Charities, of this State, for 1890, page 104, occurs the following paragraph:—

"In the present report and chapter will be found accounts of ten naked patients, six men and four women, in Adams County; an insane woman confined in a pen in Bond County; an insane man in Boone County who is so troublesome that the keeper is paid extra for taking care of him; a miserable pen in DeKalb County; another in Franklin County; the insane department in Fulton County is declared a nuisance which should be abolished; in Jackson County three idiots, one of them an epileptic, are taken care of by an insane woman; in Jefferson County an insane woman sleeps alone in an outhouse; in Kane County, where fourteen insane are locked up, they make day and night hideous, and thirteen of them are disposed to denude themselves; in Knox County a naked man was found; in McHenry County the authorities are compelled to care for a man who can not even feed himself; the new insane department in Menard County already smells to heaven; the insane department in Montgomery County is condemned as unfit for use; the same is said of that in Shelby County; in Stark County two steel cages have been purchased for the insane, six by seven feet in size; in Wayne County the insane are filthy and ragged; Whiteside County has a naked insane woman on straw in a box."

Contrast this picture of county care, with its evident lack of medical supervision, of trained attendants, of facilities for classification and of suitable accommodation, with the intelligent and humane care given the insane in the four State hospitals, and there will be a ready appreciation of the force and sufficiency of some of the reasons upon which is based the opinion expressed.

There can be no doubt in the mind of any reasonable person that the circumstances which made it possible, in 1890, to frame such an indictment against the county care of the insane as that embodied in the quotation above given, were largely brought about by an evasion, by the managers of the State hospitals, of the last clause of Section 3 of an Act to regulate the State charitable institutions, in force April 15, 1875, which provides:—

That, in the admission and retention of patients, curable and recent cases shall have preference over cases of long standing, and that violent, dangerous, or otherwise troublesome cases shall have preference over those of an opposite description.

Human nature is much the same the world over, and so long as the laws permit insane patients to be returned to the counties by the State institutions, it will occasionally occur that trustees and superintendents of State hospitals, biased by self-interest, will allow patients such as those above described, to find their way back to the county asylums, the while harmless and easily cared for cases are being shown to visitors in the front wards of their hospitals. The remedy for this evil lies in prohibiting, absolutely, the care of the insane at the hands of every county in the State, with the possible exception, at present, of Cook. The prohibition might be omitted in exceptional instances, as for example, in the case of a mild, quiet, harmless, chronic pauper patient, who would be happier in the county almshouse, with its more elastic rules and greater freedom. In such a case the patient might be paroled to the county, the latter receiving a stipend from the State institution. He should, however, remain under the control of the hospital and should be visited at regular intervals by one of its medical officers. The hospital should also receive regular reports from the almshouse superintendent and physician and, at least once a year, a special report from the visiting agent of the Board of State Charities.

SCOPE OF THE INSTITUTION.

Certain classes of the insane require institutional accommodation of a different and slightly more expensive character than that which is amply sufficient for the ordinary chronic and incurable classes. Of the former may be mentioned the recent admissions; the acute cases; the weak and helpless; the sick and injured; the suicidal and homicidal; the filthy; those who denude themselves, etc. These require for their care and treatment wards of smaller size and a larger proportion of superficial space, together with accommodations for a greater number of attendants—in short, *hospital* accommodation. The ratio

of these to the other classes may be estimated at about one of the former to five of the latter.

Another group of cases would include the convalescents; the mildly insane; those with lucid intervals; the quiet; the well-mannered, etc. These may, for the most part, be treated with much freedom and require, so far as practicable, home comforts. Wards for their accommodation need neither hospital nor prominent custodial equipment, and only a small staff is required for their care. These classes constitute about one-sixth of the insane. The remaining two-thirds form the bulk of the chronic and incurable classes which need simply safe and comfortable asylum accommodations and care.

COMBINED OR SEPARATE INSTITUTIONS FOR THE ACUTE AND CHRONIC CLASSES.

Because a very large proportion of the insane are cases of long standing and hopeless it has been proposed, on many occasions, to care for these in separate institutions, cheaply constructed and conducted. This has been urged chiefly from an economic standpoint. In this connection it may be said that, as a general proposition, the cost of hospitals in the past has not been determined, in any great measure, by the character of the patients to be treated. It has been shown that the proportion of patients requiring special hospital facilities, which add but little to the expense, is only about one-sixth of the whole number. Is it not as reasonable to cheapen, as far as practicable, the construction of the wards for the remaining classes in connection with a general as with a special institution? Unhesitatingly, yes. As a matter of fact, the cost of these institutions is governed almost entirely by their size; the cost of the central plant; the character of the construction of the ward buildings; the technical knowledge employed in formulating plans and the efficiency of administration during construction. In erecting these great eleemosynary institutions there should be, in

the matter of cost, a happy medium which should be earnestly sought. The expenditure of vast sums for useless accommodations, expensive administration buildings or costly embellishment should be absolutely interdicted, but if this wasteful extravagance is to be so severely deprecated, what words shall we use in condemning the criminal parsimony which erects flimsy fire-traps—lacking only time and opportunity for affording a horrible holocaust of the helpless insane wards of the State?

For practical purposes, insane hospitals, in their construction, may be divided into three classes:—1, ordinary, or quick burning construction; 2, slow burning, or semi-fireproof construction; 3, strictly fireproof construction. Justice, humanity and true economy should prevent the erection of buildings of the first class. Buildings of the second class may be allowable, provided the roofs and attics are made indestructible, the buildings not more than two stories in height and with a proper arrangement of rooms and exits. The recent and remote experience of this State; a correct appreciation of the obligations of the State to those whom it compels to inhabit these structures and a true economy point unwaveringly toward the third class as the proper one to be adopted. Fortunately the comparatively small additional expense of fireproofing buildings places this form of construction within the reach of, certainly the great State of Illinois. Generally speaking, it may be said of buildings for the insane that if they are very cheap they are not safe, and if entirely safe they can not be very cheap.

The first, and in many respects the most notable example of the establishment, on any considerable scale, of a separate institution for the exclusive use of the chronic and incurable insane was that at Willard, in New York. This asylum was opened in 1869 and its capacity gradually enlarged to 1,938. It has 904 acres of land and the estimated value of lands, buildings and equipment is \$1,541,000, or a per

capita rate of \$795. The character of some of the construction may be inferred from a statement to the State Commissioners in Lunacy, in 1891:—

“A great deal was done during the year in the way of extraordinary repairs . . . The greater part of the foundation walls of detached group No. 2 were taken down and rebuilt.” “A portion of the buildings of this institution was formerly the property of the old State Agricultural College.”

In 1881 the State of New York established, at Binghamton, a second asylum for the chronic insane. This institution has 1,057 acres of land and a total valuation of \$759,375. The capacity is 1,050, thus giving a per capita cost of \$723.

These two asylums for the chronic and incurable insane were never satisfactory to patients, their friends or the medical officers of these and the other hospitals of the State, and in 1890 the project of the separate care of these classes was definitely abandoned by the Legislature. These hospitals now admit all classes of the insane and the other six State institutions retain their chronic cases. Dr. T. S. Armstrong, late superintendent of the Binghamton Asylum, in his report for 1888, mentions one of the objections met with as follows:—

“Many patients coming to this institution get the idea that they are incurable (as many of them are), and that they must remain here so long as they live. . . . To them it blots out all future prospects of recovery, and of a return to their home and friends. The mental, moral and physical effect of this is most unfortunate.”

The Legislature of Massachusetts, in 1890 and 1892, authorized the building, at Medfield, of an asylum for the chronic insane, with a capacity for 1,000 patients and to cost, exclusive of expenses for land and administration, \$500,000. In order to keep within the appropriation, buildings were erected which, when nearly completed, were condemned as being too unsafe for occupancy. To make the fire-traps safe it was found to be necessary, at enormous expense, to replace the hollow wooden partitions by brick and

terra cotta; the wooden supports of the floors and roof by iron beams and columns; to excavate for additional foundations; to provide additional means of exit in case of fire, etc. It is safe to say that these changes, together with the suits for damages which were expected to follow, will bring the total cost to a point far beyond the original estimates.

Pennsylvania began, in 1891, at Wernersville, an asylum for the chronic insane, with a capacity of 800. It has only recently been opened. The State Committee on Lunacy say, in their report for 1892, in considering its success:—

“The success of this asylum will greatly depend upon the appointment of the medical officer and his subordinates. All such officers should be shown to be in harmony with the theory of the separate care of the class for which the institution is intended.”

The above four instances are the only examples, so far as my information extends, of the separate care, upon a large scale, of the chronic insane in institutions especially established for this purpose by any of the States. Of these, two have been abandoned after trials of twenty-two and nine years, respectively; one has been inaugurated within the past few weeks, and one is yet in process of construction.

The department for the chronic insane of the Worcester hospital and the county asylums of Wisconsin are not considered germane to this subject. Of the latter Dr. Walter Kempster says:—“The so-called ‘Wisconsin plan’ does not meet the conditions which an enlightened people demand, and sooner or later will be supplanted by some such management as the great State of New York has wisely adopted, and which I believe to be just and right.”

The many arguments against the separate care of the chronic insane have been advanced so often and so forcibly during the past thirty years that they require at my hands no extended mention. It must be clear to any intelligent mind that every advantage of economical provision and maintenance, of comfort and occupation, which the chronic insane may have in separate asylums may be afforded them in hospi-

tals for all classes; and further, that if any division of this kind will cost less for the chronic, it will add correspondingly to the cost for the care of the acute cases.

AGRICULTURAL EMPLOYMENT.

It has always been recognized, more or less fully, that occupation is useful for the insane. Thus the ancient Egyptians treated their insane by "amusement, occupation and healthful habits." It was occupation, especially in tilling the soil, that has made the Gheel colony a possibility and in the present century the advantages of having a large farm attached to hospitals for these classes have been fully appreciated since 1821, when Esquirol established his farm and called attention to the benefits derived therefrom. In this country it is a firmly established custom, from which reason and experience would not warrant a departure. The amount of land attached to a few of the leading hospitals, together with the proportion per patient, is herewith given:—

State.	Hospital.	Acres.	Capacity.	Per patient.
Massachusetts . . .	Westborough . . .	836	405	.83 acres
" . . .	Danvers . . .	255	863	.29 "
" . . .	Northampton . . .	493	470	1.05 "
" . . .	Taunton . . .	172	698	.24 "
" . . .	Worcester . . .	488	650	.67 "
New York	Utica	225	700	.32 "
"	Poughkeepsie . . .	683	830	.76 "
"	Middletown . . .	281	675	.41 "
"	Buffalo	203	525	.88 "
"	Ogdensburg . . .	950	1,500	.63 "
"	Rochester	35	300	.11 "
Indiana	Indianapolis . . .	160	1,524	.10 "
"	Evansville	160	400	.40 "
"	Richmond	309	434	.70 "
Minnesota	Rochester	480	630	.76 "
"	St. Peter	673	940	.72 "
Iowa	Independence . . .	580	800	.72 "
Illinois	Jacksonville . . .	160	1,180	.13 "
"	Elgin	510	1,100	.64 "
"	Kankakee	840	2,000	.42 "
Totals and averages, 21 hospitals . . .		7,853	16,624	.47 acres

In my opinion an hospital intended for all classes of the insane should have at least one-half acre of good arable land for each patient, and double this amount would not be excessive.

In regard to the proportion of male patients—of mixed classes—who are able to work upon a farm, statistics give us no reliable information. As the result of much inquiry and personal observation, I am of the opinion that the number of these patients who are able to work and who would be benefited by out-door employment is much larger than is generally supposed. It may be reasonably assumed that, in round numbers, 25 per cent. of hospital patients are obviously unfit for such employment, and of the remainder probably two-thirds could be advantageously employed in this manner. The spirit of our people is opposed to employing women at farm work, but an equal proportion of female patients may be given, in other directions, suitable and healthful employment. Useful employment is pleasurable and remediable to the insane while enforced idleness is a grievous punishment. Experience has long since demonstrated that properly regulated employment, together with an abundance of good food are prime factors in bringing about the result of a healthy, quiet and contented hospital. How often has not every one who has had practical experience with the insane seen restless, excited and sleepless patients become quiet, contented and sleep like babes under the influence of interesting occupation and a liberal dietary!

EPILEPTICS.

Epileptics who are insane should be cared for in hospitals for the insane, rather than in institutions for epileptics. If this point is conceded the erection of an institution for epileptics would not relieve the overcrowding in the hospitals for the insane. The fact, however, that the non-insane epileptics require a special care which can not be given them in the county almshouses, renders it highly desirable that such of these as are public charges should be given a State institution for their care. Such an institution should be as largely industrial as possible and might be made nearly self-supporting. Accord-

ing to the Report of the Board of State Charities for 1892, there were in the county almshouses of this State, 247 epileptics—140 males and 107 females. These, together with the purely epileptic in the Institution for the Feeble-Minded, and those awaiting admission into the latter, would be sufficient to fill a large institution.

BOARDING-OUT SYSTEM.

In the legendary period of history an Irish maiden fled to Flanders to escape the persecutions of a cruel father. She was here discovered by her unnatural parent and after suffering great indignities at his hands died and was buried in the chapel at Gheel, near Antwerp. The patient fortitude displayed by the young girl led to popular sympathy and, finally to her canonization as Saint Dymphna. By some means, not now clear, the belief became prevalent that miraculous cures of those affected with mental disorders were brought about by worshiping at the shrine of St. Dymphna, and as early as the seventh century the insane began making pilgrimages thence, hoping to find relief from their infirmities. These found entertainment, during their sojourn, in the houses of the neighboring peasants. In some cases their stay was greatly prolonged and in not a few instances they were abandoned by their friends and relatives. Many peasant hosts continued to keep these abandoned lunatics and, to lighten the burthen of enforced hostship the guest was required to assist in the peasants' work. In some cases, also, the poorer pilgrims were received as guests conditioned upon their performing services to pay, wholly or in part, for their keep. As time passed it became apparent to the peasantry that the care of the insane was profitable to the community, both directly from the money paid by those able to pay and from the service rendered by those unable to pay in money. Unfortunately there accumulated a class too poor to pay and unable to work, and the burthen thus produced

was relieved by the State paying an annual stipend for their keep. In this manner, after centuries of gradual development, has been formed the peculiar community of Gheel, wherein peasants receive into their homes, as guests, the insane and are recompensed therefor by a stipend from the State, the estate of the patient or by his labor.

In 1851 the Belgian government assumed control of the insane at Gheel, established an infirmary, provided for supervision and proclaimed regulations for the host-guest relationship of peasant and patient. The village embraces a large agricultural district and contains about 11,000 inhabitants, including 1,800 insane. The latter are, for the most part, accommodated in the homes of the peasants, not more than two of each sex being allowed in one house. The system seems to be locally satisfactory.

The success of the Gheel colony has led to the query whether this boarding-out system, modified to meet local requirements, might not be advantageously adopted elsewhere. Two lunacy boards, notably—those of Scotland and of Massachusetts—have answered this question affirmatively, and in both localities the system has been in operation long enough for us to judge its results.

In Scotland, where the boarding-out system has been in vogue a great many years, it has met with a fair measure of success. As a rule, patients are dispersed and are not concentrated in villages. In some instances, however, the harmless and incurable insane of the larger centers of population, as for example Edinburgh and Glasgow, are placed, to the number of ten to fifty in certain villages, but the practice is not considered desirable. Not more than four patients are permitted in any one house, but the actual number scarcely ever exceeds one or two. They are regularly visited by the visiting agents of the Lunacy Commissioners, and are under the control of these officers. So long ago as January, 1875,

Sir James Coxe, one of the Commissioners, in a letter, says:—

“There is a growing difficulty in procuring and retaining suitable accommodations. . . . As a rule, the chronic patients removed from asylums are sent home to their parishes to live with friends.”

This difficulty of finding suitable homes for those having no friends, willing to assume their care, has increased rather than diminished, and the Commission, in their report for 1884, make special mention of the fact:—

It was being forcibly recognized in Scotland that great care was required in the selection of households in which lunatics could be safely and advantageously “boarded out.” It was realized that if the system was not to be discredited, more and extraordinary care would be needed in the sending from the asylums only suitable cases and finding for these congenial homes. It had been noted that where the family as a whole were uncongenial to the temperament of the patient the latter was often soon returned to the asylum in an excited and miserable state. It could not be doubted that, in some cases at least, mischief may be and is done by “boarding-out” harmless lunatics in households where they are exposed, not simply to privations, but to irritation and petty grievances hard to bear.

With the most strenuous exertions it has never been possible to get out, in this manner, any large proportion of the insane, notwithstanding the well-known docility of the Scotch lunatic.

Massachusetts began, in 1881, to employ the “boarding-out” system in the care of a small portion of her insane.

During the first year 5 were “boarded-out;” during the second year the average number out, was, 21; third year, 60; fourth year, 113; fifth year, 94; sixth year, 126; seventh year, 142; eighth year, 168; ninth year, 164. Of the forty-seven thus sent out in 1892 forty-three were placed out for the first time. Of these, seven were returned to the hospital; two from persistent use of bad language; four for non-conformity to family life and requirements; and one because of frequent elopements. All of these, upon their return to institution life, immediately resumed their former quietude and readily acquiesced to existing rules.

Previous to making the change from institution to

family life it is the custom to obtain the consent of the patient, if sufficiently intelligent; of the friends, and, if a pauper, of the overseers of the poor. Of this phase of the subject the Board of Lunacy, in their report for 1893, says:—

“It not infrequently happens that patients who appear suitable for family life object to the change, being fond of the regular and pleasant life at the hospital; or their friends think the change unwise; or overseers of the poor object, both on the score of economy and dislike of the system. More women than men are boarded out, and are generally preferred to men as boarders. Applications for boarders are filed, and the families are visited and carefully examined. After being placed, it sometimes happens that a patient has to be transferred several times before a suitable family can be found. During the last few years so many patients suitable for boarding-out have been removed from the hospitals . . . that but a small number has been left; these, from time to time have all been placed in families. In future the number will increase but slightly, only such cases occurring as naturally develop in the institutions.”

In their report for 1894, the Board again expresses its opinion:—

“It will be seen that the number of insane boarded in families has somewhat decreased during the year, although persistent efforts have been made to place out all who appear suitable for such treatment.”

Without special thought or design there has been developed a most admirable system of dispersion of the harmless chronic insane. I refer to the parole system, under which properly selected cases are sent home to the friends and relatives for immediate care, but remain under the jurisdiction of the hospital authorities. This necessarily has a narrow field, but it is fully as wide in its applicability as the boarding-out system. More attention is given this feature in some institutions than in others, but experience shows that if the authorities are earnest and persistent in the matter a reasonable proportion of the insane may be very happily cared for in this manner. It is probable that the extension of the system, if thought desirable, might be stimulated by paying

the friends having the patient in charge, a sum equal to the cost of his subsistence were he in hospital.

The extent to which the parole system is utilized in a few State hospitals is shown in the following table:—

State.	Hospital.	Date.	Patients in Hosp.	At Home on Parole	Per Cent.
South Carolina .	Columbia . .	Oct. 31, 1893 .	796	37	4.64
Ohio	Columbus .	Nov. 15, 1893 .	1,197	106	8.85
Minnesota . . .	Rochester .	July 31, 1888 .	751	26	3.46
"	St. Peter . .	July 31, 1888 .	954	25	2.62
Nebraska	Lincoln . .	Nov. 30, 1890 .	326	13	4.00
Kansas	Osawatomie	June 30, 1890 .	519	34	6.55
Illinois	Kankakee . .	Nov. 19, 1894 .	2,090	73	3.73
"	Jacksonville	Nov. 16, 1894 .	1,222	10	.81
"	Elgin	Nov. 18, 1894 .	1,115	30	2.69
"	Anna	Nov. 19, 1894 .	858	32	3.75
Totals and averages, 10 hospitals			9,823	391	4.00

It is thus seen that about 4 per cent. of patients carried upon the hospital registers are at home on parole.

Desiring to obtain definite information of the workings of this system in this State, I recently wrote the superintendent of each of the large public hospitals for the insane inquiring as follows:—

1. How many patients have you on your register?
2. How many are at home on parole?
3. Is any supervision exercised over patients out on parole?
4. Is any special effort made to get harmless chronic cases out on parole?
5. Do you approve the system?

To these questions the various superintendents courteously replied as follows:—

Dr. Arthur Loewy, of the Northern, reports 1,115 patients on the register, with 30 at home on parole. Paroled patients are supervised by correspondence with their friends. He always recommends the removal of harmless chronic cases whenever they can be cared for at home. He approves the parole system.

Dr. W. C. Lence, of the Southern, states that at his institution no supervision of paroled patients is exercised, except to instruct the friends to return them if they become worse. Special efforts are made to get patients out on parole, and he approves the system.

Dr. J. F. McKenzie, of the Central, says: "We exercise no supervision over patients on parole. They simply have the privilege of returning within the quarter without further legal proceedings. We are compelled to make considerable effort to get chronic cases sent home in order to make room for acute ones, as our institution is now, and has been for several years, full to overflowing. I think the system of granting parole is a good one."

Dr. Ciarke Gapen, of the Eastern, says: "There is no special supervision exercised over patients who are out on parole, except when we send a special attendant to accompany them, which we do at times. There has been no special effort made to get harmless chronic cases out on parole. I think, however, that much could be done, not only to relieve the institutions, but for the benefit of the patients themselves by such efforts. . . . There are many patients in this Institution who, I think, could get on outside. . . . If the friends or county authorities could be induced to take a proper interest in them. . . . In answer to your fifth question, I would say that I do approve of the parole system, as it is difficult for us to say positively when discharging a patient whether such patient is in condition to bear the strain of ordinary life or not, and this can generally only be ascertained by trial. The quasi-criminal method of commitment in vogue in Illinois, makes it a very unpleasant thing for a half-recovered patient to be re-committed to an institution."

Dr. McGrew, of the Cook County Insane Asylum, says:—"We have 1,067 insane patients on the register. Very few are at home on parole. . . . No special supervision by the asylum authorities is exercised over patients after they leave the institution. Friends are required to assume all responsibility after patients are removed. . . . No special effort is made to get harmless chronic cases at home on parole; neither is any great objection made to friends removing them if they desire, because of the over-crowded condition of the wards. We believe that the insane, including the harmless chronic cases can be better cared for—with more advantage to themselves by the asylum system rather than at home."

The advantages of the parole system, as practiced, over the boarding-out system lie in the fact that the harmless chronic insane are in the hands of their relatives and friends, who are apt to take in them a more kindly interest than would strangers who were actuated solely by mercenary motives. The subject is one of interest and practical importance and well worthy of extended inquiry and careful consideration.

THE INSTITUTION.

Capacity.—The first questions to be asked in designing an institution for the insane is, What shall be its initial, and what its ultimate capacity? If these are to be the same it may be constructed upon rigid lines; if both are known only a limited degree of flexibility of design is necessary; but if, as is usually the case, the initial capacity is known, while the ultimate capacity is a decidedly unknown quantity, then the design should be so elastic that future extensions may be economically made, to any reasonable extent, without marring the symmetry or incurring any loss of balance. The truth of this proposition has been so often demonstrated that it should not only be frankly acknowledged, but heeded as well. Without going into any argument upon the subject, we should also acknowledge the fact that the irresistible tendency of the times is toward large institutions. The day of small State insane hospitals has long gone by, never to return—they offer no advantages and can not be afforded.

The question of capacity, initial and ultimate, should receive careful consideration in connection with the proposed new hospital for the insane in Illinois. It is clear that the initial capacity should provide for present needs, plus the probable increment during the period of construction, and the subject of present requirements will first demand attention.

There were, in 1880, in Illinois, 5,121 insane persons. In 1890 there were 6,638 insane, an increase equal to about 3 per cent. per annum. A continuance of this rate to the present time would indicate that there are now 7,534 insane persons in the State. Dr. Bettman, President of the Board of State Charities, estimates the number at 7,000. If the increment continued at the same rate during the construction period of a State hospital—estimated at two years—the number would be 7,932.

The comfortable capacity of the four State, and one large county, hospitals, together with the number of inmates now present, and with the overcrowding, as represented by the excess, is shown below:—

Hospital.	Capacity.	Inmates		Excess.	Deficit.
		Nov. 19, 1894.			
Kankakee. . .	2,000	2,000		90	
Jacksonville	1,200	1,222		22	
Elgin.	1,100	1,115		15	
Anna.	946	853			93
Dunning. . .	900	1,067		167	
Totals. . . .	6,146	6,347		294	93
					Corrected excess 201.

In 1892 there were in the county almshouses of the State—outside of Cook County—848 insane persons, distributed as follows:—

In the counties composing the Central Hospital District, 425; Northern, 167; Eastern, 158, and Southern, 98.

That these numbers have not decreased since that date is made clear by the investigations of Dr. J. F. McKenzie, Superintendent of the Central Hospital, who writes me as follows:—

“In the thirty-three counties composing our Lunacy District there are something over five hundred insane persons confined in poorhouses and jails. This fact I learned by sending a circular letter to the county clerks of the different counties.”

It is quite probable that a canvass of the counties of the other hospital districts would disclose a corresponding increase in the unprovided-for insane.

Taking, then, the 848 insane in the almshouses, plus the probable increase of 144 and the hospital excess of 201, and we have a total of 1,193 insane persons in Illinois who urgently need hospital care at the hands of the State. The number will have considerably increased before the end of the building period.

Taking all these, and other facts into consideration, it is a reasonable opinion that the proposed new hospital should have an initial capacity for, at least, 1,200 patients, and that the growing demands of the State will require an ultimate capacity of, certainly, more than two thousand. These figures, instead of appalling our authorities should lead, instead, to careful consideration and judicious action.

Location.—It will have been noticed that the Southern Hospital has a capacity for 946, with only 853 inmates. It can accommodate 93 more than it does, and this is nearly equal to the number of the insane

in the almshouses of the Southern District in 1892—98, or the probable present number, 114. The slight excess indicated could probably be best provided for by transferring the twenty-six insane of Clark County to the Eastern District. The almshouse contingent and hospital excess—dividing that of Cook County as provided by law—of the other districts would be about as follows:—Central, 522; Northern, 266; Eastern, 412; total, 1,200. A glance at the map, with due consideration of the present hospital districts, distribution of population, lines of transportation, etc., will show that the proposed new hospital should be given a district composed of the northern counties of the present Central District; the north-western counties of the Eastern District, and the western counties of the Northern District.

The hospital should be centrally located and be conveniently accessible to all parts of the district it is intended to serve. It should be near some town or city of moderate size. The water supply should be of good quality and practically inexhaustible. Facilities for drainage should be perfect. Proximity to a cheap fuel supply and adequate railroad facilities are very important. These are of such vital importance that no site should be even considered which does not fulfill, absolutely, the first four requirements, and meets, fairly, the last. There are many other circumstances which will recommend one site above another, but these can not be considered.

Water Supply and Drainage.—In the matter of water supply the history of so many public institutions has been unfortunate that I feel the subject worthy of special mention and emphasis. As stated above, the water supply should be inexhaustible and the drainage perfect. The water supply plant should be designed for furnishing water at the minimum rate of 100 to 300 gallons per patient daily, and the system of drainage should easily dispose of the resulting effluent. Furthermore, inasmuch as the history of our State institutions show that they almost in-

evitably undergo enlargement, the mains for water and the trunk lines of sewer should, from the first, have a capacity of, at least, double that of the initial capacity. To meet the contingencies of possible accidents, two pumps should be provided.

Design.—Within a period of time easily compassed by the memories of persons yet living, three distinct systems of insane hospital construction have, in turn, found favor at the hands of superintendents and building commissioners, viz., the corridor, the cottage and the detached pavilion. The long gloomy corridor; the heavy-laden atmosphere, and the constantly occupied ward have condemned the Kirkbride plan. The great cost of construction, and of maintenance, together with the impossibility of exercising any efficient supervision have made the cottage hospital unsatisfactory. The objections urged against the cottage system apply to the detached pavilion. The last two are free, in principle, from the radical and inherent sanitary defects of the first named.

Progressive managers of hospitals for the insane, in common with other enlightened directors of public economic affairs, have been, and always will be, eager to adopt that which all the world is seeking—the “something better”—and to the credit of these managers it may be said that there have been very few examples of retrograde movement in the construction of American institutions of this class.

Although not often formulated there can be no difference of opinion as to the fundamental requirements for the modern State institution for the insane. It must be healthful; it must conduce to the curability of insanity; it must afford facilities for minute classification; it must protect patients from injury; it must protect attendants from unjust accusations; it must permit efficient supervision by day and by night; it must be susceptible of convenient administration; it must be of economical construction; and, finally, it must favor economical maintenance. These requirements are not of an extraordinary na-

ture—on the contrary, they are essentially commonplace, and common-sense—and they may be had in combination without sacrificing in any degree their individual excellence. Certainly, every new hospital should demand and receive the highest obtainable excellence in each and every one of these particulars.

Facilities for Supervision.—The wards should be so arranged as to permit efficient supervision, without increasing the cost. A closer system of supervision has always been desired by hospital managers and various expedients have been resorted to in the endeavor to improve upon ordinary methods. Thus there has long been employed at Norristown, near Philadelphia, a system of supervision by an inspector, who occupies a small chamber between two wards, elevated above the second floor. From this chamber the occupant commands a view, directly, of the two upper wards, and, by means of a tube and an arrangement of mirrors, of the two lower wards—in all, four wards. Of this system the Committee on Lunacy of Pennsylvania have to say in their report for 1891:—

“With the added experience and observation of another year your committee are firmly convinced that the present method . . . of supervising the duties of those who daily attend the inmates should be improved. The so-called inspectory system established by the superintendent of the male department of the Norristown Hospital, whereby inspectors control a view of the wards and occupants at all times, has continued in successful operation for several years past. . . . Your committee have been watching with interest the practical working of this system and further observation of the results, as compared with the usual methods of supervising attendants on duty, has led us to a favorable opinion of the inspectory system and, we recommend to the earnest consideration of the trustees and superintendents of other hospitals this, or some other plan for the better protection of the patients from violence, injury, or any dangerous coercion, and the attendants from groundless accusations.”

The Norristown system may be extended and simplified by centrally locating the supervisor's office, with respect to a group of four or eight wards, and placing it about four feet below the second floor so

that a person occupying it may have a view of all the wards on both floors. This room, being open to view and occupied by an ordinary officer changes the system from one of espionage to one of close supervision. However, the system is so elastic that any degree of oversight—from the closest surveillance to none—may be had at will.

Insane inmates of hospitals have their comfort and safety jeopardized at the hands of themselves, their fellows and their attendants. These dangers become greater in proportion to the distance the patients are removed from official supervision and control. The plans under which institutions for the insane are usually constructed remove a large proportion of the inmates—and often those who particularly require close surveillance—far from the seat of official authority and necessarily prevents that careful supervision which their interests demand. Under the modification proposed, the officers in authority are centrally located and have at all times—day and night—opportunity to see every ward and occupant and exercise a close, constant and immediate supervision over attendants and patients, guarding the latter and detecting negligence, unkindness and cruelty upon the part of the former, and protecting them from unjust charges.

Radiate Pavilion Wards.—To facilitate supervision and night attendance; to render administration more convenient, and to cheapen construction and maintenance, some of the buildings of such an institution may take the form of radiate pavilions.

The earliest examples of hospitals upon the radiate system, so far as my information extends, date back to, or beyond the twelfth century, when two were erected in France; one at Angers and the other at Chartres. During the war a very large hospital of this class, with a capacity of about thirty-two hundred, was operated at Washington, or Philadelphia, and was considered a model. The Marine Hospital at San Francisco, designed by Surgeon-General Ham-

ilton, has some wards arranged in this manner. The model hospital exhibited at the World's Fair by the United States Government was upon this system. The Southern Indiana Hospital for Insane, at Evansville, is a notable example of this form of arrangement of wards for patients of the classes under consideration. Of the Evansville Hospital, the Indiana Board of State Charities have this to say—in advance of the opening of the institution—in their report for 1890:—

“The building is on what is known as the radiate plan, which is original as applied to hospitals for the insane. Its leading feature is that of bringing each section into equally close connection with the administration department, while still giving the advantages of light and air on all sides of every ward. It is expected, with reason, that this plan will be found to facilitate supervision and promote economy in the domestic arrangements, heating, water supply, etc.”

After the hospital had been occupied for two years, the same Board says:—

“The internal affairs of the hospital have been remarkably free from disturbances of any kind. . . . It is possible that this condition of things, which must be recognized as more than ordinarily favorable, is partly due to the construction of the building. . . . It was designed, as is well known among persons who study hospital construction, by Dr. Rogers, and was the result of the careful study and experience of a very practical man. His opinion was that the radiate plan . . . would be moderate in first cost, economical in maintenance and particularly easy of supervision. The experience of the last year has certainly borne out all he claimed for it as far as maintenance and supervision go.”

Later, and after four years' use of the hospital, Dr. Thomas, the medical superintendent, writes me as follows:—

“There are three things claimed for the radiate plan of hospital . . . 1, economy in construction; 2, economy in maintenance; 3, convenience of administration. The first claim has not been proven in the construction of this building, but in another building extravagance may be avoided. The second and third claims are absolutely proven to the most satisfactory degree. In my opinion the radiate plan has decided advantages over both the Kirkbride and the cottage plans.”

Attendants.—The proportion of attendants to pa-

tients which is to be allowed will have an important bearing upon the number, size and arrangement of the wards. In a large State institution for the insane, where the interests of the tax-payers require the practice of as rigid economy as the proper care of the patients will permit, the wards might well vary in capacity from fifteen to thirty-two and be cared for by two attendants. To be sure, in practice, these numbers will vary according to circumstances. The practice in different hospitals may be inferred from the following table and statements:—

State.	Hospital.	Patients.	Attendants.	Proportion.
New York	Poughkeepsie	738	105	1 attendant to 7.0 patients.
"	Binghamton.	1,186	157	1 " 7.2 "
"	Middletown.	709	80	1 " 8.8 "
Indiana	Indianapolis	1,524	188	1 " 11.0 "
"	Richmond.	434	39	1 " 11.1 "
"	Logansport	364	32	1 " 11.3 "
Minnesota	Rochester...	681	49	1 " 13.0 "
Kansas..	Osawatomie.	519	89	1 " 13.3 "
Ohio...	Toledo...	1,174	88	1 " 13.8 "
"	Cleveland..	807	52	1 " 15.5 "
"	Athens.....	813	51	1 " 16.0 "
"	Dayton.....	732	46	1 " 16.0 "
"	Columbus...	1,091	66	1 " 16.5 "
Illinois..	Anna.....	865	75	1 " 11.4 "
"	Elgin.....	1,115	80	1 " 13.9 "
"	Kankakee...	2,090	160	1 " 13.0 "
"	Jacksonville.	1,222	80	1 " 15.3 "
Totals and averages..		15,958	1,817	1 " 12.2 "

At Dayton there are twenty wards with an average capacity of over thirty-six patients. Sixteen of these have two attendants each, and four,—the sick and violent wards on either side—have three each. At Logansport there are fourteen wards with an average capacity of twenty-six patients. Ten of these have two attendants each, and four have three each. At Richmond there are nineteen wards, ranging in capacity from ten to thirty, with two attendants to each ward, except one ward, which has three. At Jacksonville there are thirty-six wards, with two attendants to each, except four disturbed wards on which three attendants are employed. At Elgin there are two attendants to each ward, except on five, where there are three each. At Anna, two wards have one attendant each; twelve wards two attendants each; nine wards three attendants each, and four wards four attendants each. At Kankakee four wards have one attendant each; fourteen wards two attendants each; six wards three attendants each; seven wards four attendants each; two wards five attendants each; five wards six attendants each;

one ward has seven attendants, and one ward has nine attendants.

Night Attendance and Night Supervision.—The attendance of insane patients at night—nursing the sick; attending to the wants of the well; soothing the excited; reassuring the fearful; caring for the filthy—and the supervision of night attendance, is a subject of prime importance. The prevailing practice varies in different institutions, but that much is left to be desired in this particular is almost universally admitted.

In Massachusetts, "at Westborough Hospital and the asylum wards of the State Farm every patient is seen each hour during the night. . . Danvers Hospital has some large associate dormitories which have special night attendants; and these, together with the suicidal wards and infirmaries, make ten wards at the hospital having special night nurses—the largest number of any hospital in the State. . . In some institutions many patients are not seen from the time they are locked in their rooms at night until they are awakened in the morning. A homicide at one hospital has illustrated the danger of confining two patients in one room; and there is but one hospital in the State where this is not done. Taunton Hospital alone, under such circumstances leaves the door unlocked and wide open. The State Almshouse has in its asylum wards some rooms in which two patients are confined at night, but hopes to soon do away with this practice."

The practice in New York is as follows:—At Utica with 786 patients, 11 night attendants are employed. On the male side three wards—the suicidal, the filthy and the epileptic—each have one night attendant. On the female side four wards are attended by four nurses. All the other patients are looked after by four perambulating attendants. At Poughkeepsie 733 patients are cared for at night by 16 attendants. On the male side, 380 patients, and on the female side, a small number, are constantly in sight. At Willard 2,055 patients are given 32 night attendants. In the infirmiry group 180 males have 4 nurses and 260 females have 10 nurses. In the other groups nine wards have each a night attendant. The remainder are looked after by nine perambulating night attendants who make hourly visits. At Buffalo, with 509 patients, 9 night attendants, 7 of whom are assigned to single wards and 2 making regular rounds. At Binghamton the 1,136 patients have 23 night attendants—16 on wards and 7 making rounds. At St. Lawrence 227 patients had 4 night attendants—2 in each of the two occupied cottages.

In Ohio, at Columbus there are 6 night attendants to 1,091 patients; at Cleveland 4 to 807; at Athens 6 to 813; at Longview 8 to 880; at Dayton 4 to 732; and at Toledo 10 to 1,174 patients.

In Indiana, at Logansport there is one night attendant to each of the ten detached pavilions. At Richmond there is one night attendant to each of the twelve cottages.

In Illinois, the practice, as courteously reported to me by the superintendents of the respective hospitals, is as follows:—At Anna there are five general night watches making rounds. There are no regular night attendants on wards but they are especially detailed as required. Supervisors and medical officers are subject to call, but none are regularly on duty at night. Dr. Lence, the superintendent, would like to have a regular night attendant for all patients were it not for the expense. Dr. McKenzie, of Jacksonville, says:—"Six night watches make hourly rounds. . . . When we have a case of acute sickness we always detail two attendants to watch and if the case does not require special attention, the night watches give them attention every hour." Dr. Loewy, of Elgin, writes:—"We have . . . fourteen night attendants on the wards. . . . On the hospital wards the night attendants act as nurses. The night attendants are assigned wards in proportion to the character of the patients on those wards. On the hospital wards one night attendant remains constantly on duty, one also on the wards containing the disturbed and untidy patients. On the better wards two and three wards are assigned to the night attendant. The head night watchman and the head night watchwoman act as supervisors on their respective sides. No medical officer is on duty at night, although I must say I am strongly in favor of it. At this hospital I believe every patient has efficient night supervision. I increased the night service by adding eight attendants about one and a half years ago. All the doors of the patients' rooms are left open at night." Dr. Capen, of Kankakee, reports:—"We have a regular night service, the night nurses numbering eighteen, ten being in the male wards and eight in the female wards. We also have two outside watchmen. The supervisors have no responsibilities at night except as they are called, but both they and the medical officers are subject to call at any time. I have been steadily increasing the night service, and would like to increase it considerably more, and would do so except for the expense. . . . I should like to have night service in every ward or cottage, which would mean the increase of this force from eighteen to about thirty."

The proportion of night attendants to patients in several institutions is shown in the following table:—

State.	Hospital.	Pati- ents.	Night Atten- dants.	Proportion.
Indiana . . .	Richmond . . .	434	12 1	night attendant to 36 patients.
" . . .	Logansport . . .	364	10 1	" " 36 "
New York . . .	Rochester . . .	350	10 1	" " 35 "
" . . .	St. Lawrence . . .	227	5 1	" " 45 "
" . . .	Poughkeepsie . . .	733	16 1	" " 46 "
" . . .	Binghamton . . .	1136	23 1	" " 50 "
" . . .	Buffalo	509	9 1	" " 56 "
" . . .	Utica	786	11 1	" " 71 "
" . . .	Willard	2055	32 1	" " 64 "
Ohio	Toledo	1174	10 1	" " 117 "
"	Athens	813	6 1	" " 135 "
"	Dayton	732	4 1	" " 183 "
"	Columbus	1091	6 1	" " 185 "
"	Cleveland	807	4 1	" " 201 "
"	Longview	880	8 1	" " 110 "
Minnesota . . .	Rochester	631	3 1	" " 210 "
Kansas	Osawatomie	519	2 1	" " 259 "
Illinois	Elgin	1115	14 1	" " 79 "
"	Kankakee	2090	18 1	" " 116 "
"	Jacksonville	1222	6 1	" " 204 "
"	Anna	865	5 1	" " 178 "
Totals and averages . . .		18,533	212	" " 88 "

Classification.—In considering the subject of classification of insane patients for institutional care, it should be remembered that a pathologic, and a working classification are not one and the same thing. In a good working system of classification for hospital care and treatment, the patients are assigned to those groups and wards in which they can be best observed, treated and cared for; where they are least irritated and where they are brought in contact with congenial associates. The system must be very elastic and its various subdivisions can not be rigidly limited or their characteristics clearly defined. These facts will account for the apparent looseness with which the skeleton scheme here suggested is outlined. It is believed, however, that it fairly represents the system adopted by the superintendents of those hospitals having facilities for such classification. It provides for an institution with a capacity for 1,200 patients, and suggestions are made as to the manner in which the future capacity may be increased to 1,580 or 2,500.

SYNOPSIS OF CLASSIFICATION.

Hospital Group, Males and Females.

	Fe- male.	Male.	Ward.		Fe- male.	Male.	Pati- ents.
Ward 1	A		Reception. For recent admissions.		25	25	50
" 2	B		Observation. " suicidal and special cases.		25	25	50
" 3	C		Sick. " the sick, injured, etc.		20	20	40
" 4	D		Infirmary. " infirm and special cases.		20	20	40
" 5	E		Untidy " untidy and filthy		15	15	30
" 6	F		Violent " violent and disturbed.		15	15	30
"	6	6			120	120	240

Convalescent Group, Males and Females.

" 9	I		Convalescent. For convalecents, etc.		30	30	60
" 10	J		Quiet. " quiet and refined cases.		30	30	60
" 11	K		Mild " mild cases		30	30	60
" 12	L		Mild & quiet.. " and quiet cases.		30	30	60
"	4	4			120	120	240

GENERAL WARDS GROUPS.

General Wards Group, No. 1.				General Wards Group, No. 2.			
Females.				Males.			
Ward 17.	26	patients.	For quiet workers.	Ward Q	26	patients.	
" 18.	26	"	" workers.	" R	26	"	
" 19.	32	"	" quiet epileptics, etc.	" S	32	"	
" 20.	32	"	" workers, etc.	" T	32	"	
" 21.	32	"	" restless epileptics, etc..	" U	32	"	
" 22.	32	"	" patients.	" V	32	"	
" 23.	32	"	" quiet demented, etc.	" W	32	"	
" 24.	32	"	" restless "	" X	32	"	
" 25.	32	"	" advanced "	" Y	32	"	
" 26.	32	"	" dangerous patients, etc.	" Z	32	"	
" 27.	26	"	" untidy patients, etc.	" AA	26	"	
" 28.	26	"	" disturbed patients.	" BB	26	"	
"	12	360	"	"	12	360	"

GROUP CLASSIFICATION AND CAPACITY.

Hospital Group.	120 females.	120 males.	240 patients.
Convalescent Group	120	120	240
General Wards Group, No. 1.	360		360
General Wards Group, No. 2.		360	360
	600	600	1200

Additional Capacity.—The wards in the various groups can be so arranged that additional wards may be erected, without disturbing those completed, as follows:—

	Female Wards.	Pati- ents.	Male Wards.	Pati- ents.	Total Patients.
Hospital Group.	2	30	2	30	60
Convalescent Group.	2	60	2	60	120
General Wards Group, No. 1.	4	100			100
General Wards Group, No. 2.			4	100	100
	8	190	8	190	380

These additions would raise the total hospital capacity to 1,580 patients. By duplicating the general

wards groups, as suggested, would increase the capacity to 2,300, and the same reduplication, with the additions, would give a capacity for 2,500 patients. In making these additions the proper hospital balance and symmetry is always preserved, and the classification will require only slight modification in detail.

Organization.—For an institution such as described, having a capacity for 1,200 patients, the following organization, for the immediate care of the insane, is proposed:—

	Hosp. G.	Conv. G.	G. W. G. No. 1.	G. W. G. No. 2.	Total.
Medical Superintendent.					1
Assistant Physician-In-charge	1	1	1	1	4
Internes	2		1	1	4
Apothecary and Pathologist	1				1
Supervisors	2		1	1	4
Attendants	24	12	24	24	84
Night attendants . . .	6	2	4	4	16
Head attendants . . .		2			2
Totals	36	17	31	31	116
Proportion of attendants to patients					1 to 14.2
Proportion of night attendants to patients					1 to 75

It is very important that the questions of total, group and ward capacities; of classification, and of organization, should be considered and provisionally decided upon before even preliminary studies are made for the plans for any proposed hospital. Plainly the buildings should be made to accommodate the inmates and to meet their various necessities and not *vice versa*.

Plans.—The details of plans for hospitals for the insane must vary within such wide limits to meet individual requirements that this subject can only be considered in a very general manner. However, there are some features of hospital construction which, if satisfactory results are to be obtained, must be considered as either essential or highly desirable. Some of these are briefly enumerated:—

1. Every institution erected for the care of the insane should be an improvement upon previous structures. It should retain the good features of the older ones and it

should possess some new combinations or additions which will render it a decided advance in this field. No less ambitious object should be considered.

2. The ward should be considered the constructive unit, and each should be complete within itself and adapted to best meet the requirements of its inmates. It should be on one floor and should have a separate entrance.

3. The several rooms of the ward should be conveniently arranged and they should have an abundance of light and facilities for thorough ventilation.

4. The day rooms and dormitories should be entirely distinct and permit airing when not in use.

5. As far as practicable, the wards should be so arranged as to permit the supervision of several at the same time. The dormitories, especially, should be so arranged that a constant and immediate night service may be given several from a common center, thus promoting efficiency and economy.

6. Each of the groups or divisions should contain a sufficient number of wards to permit minute classification. Very large wards should be avoided.

7. Toilet and bath rooms should be separated from the living rooms by a ventilated lobby. All sewerage should be discharged directly outside the walls and there should be no basement pipes.

8. Facilities should be provided for quartering assistant physicians separately in the groups under their charge and in the immediate vicinity of their work. It is believed, and experience confirms the opinion, that by increasing the responsibilities of assistant medical officers, without diminishing the authority of the superintendent, that their interest will be enhanced and that a high grade of such officers may be obtained and retained, and that the superintendent, relieved of many petty cares and annoyances, will have more time to devote to those larger questions which should be his peculiar province.

9. The institution, as a whole and in its parts, should present a pleasing and satisfactory appearance. This may be attained in an inexpensive manner. It should not be so plain as to be ugly, neither should it have, in any sense, a palatial appearance.

10. The construction must be good, safe and substantial, and the cost moderate.

Cost.—Institutions for the insane have varied, and will continue to vary remarkably in cost, depending largely upon circumstances already mentioned. As a matter of true economy and correct principle, flimsy, cheap and shoddy construction should be avoided;

on the contrary it should be safe, plain, substantial and durable. Such construction is neither cheap nor expensive, and it is certainly not extravagant. The total and per capita cost of several hospitals is here given for comparison:—

State.	Hospital.	Capacity.	Total Cost.	Per Capita Cost.
New York	Buffalo	525	\$1,609,000	\$3,065
"	Poughkeepsie	830	2,039,000	2,456
Pennsylvania	Danville	750	1,593,000	2,122
Massachusetts	Worcester	650	1,299,000	2,000
"	Danvers	863	1,622,000	1,878
Pennsylvania	Warren	650	1,150,000	1,800
New York	Middletown	675	1,006,000	1,490
Pennsylvania	Harrisburg	650	921,000	1,400
Indiana	Richmond	434	547,000	1,260
"	Evansville	400	504,000	1,260
"	Logansport	364	435,000	1,195
Massachusetts	Westborough	405	472,000	1,165
New York	Utica	700	815,000	1,164
"	St. Lawrence	1,500	1,725,000	1,150
Indiana	Indianapolis	1,500	1,696,000	1,131
Illinois	Elgin	1,100	1,092,000	993
Illinois	Anna	946	1,054,000	1,110
Pennsylvania	Dixmont	525	690,000	1,066
Massachusetts	Northampton	470	490,000	923
Pennsylvania	Norristown	1,384	1,146,000	830
Illinois	Kankakee	2,000	1,656,000	828
"	Jacksonville	1,200	846,000	717
Massachusetts	Taunton	698	475,000	702
Totals and averages of 23 hospitals		19,219	\$24,882,000	\$1,295

In this connection, I wish to enter an emphatic protest against under-estimating the cost of adequately providing for the insane in public institutions. It has been proposed to establish complete institutions at a cost not to exceed \$200 per capita. Proper accommodations for these classes can not be furnished for any such sum, and calculations and expectations based upon such estimates are misleading and can only end in disappointment.

Insanity is undoubtedly the greatest calamity which can befall a human being. From the very nature of his condition he is usually helpless and powerless to do good and is a constant menace to the safety of himself and to others. From every point of view, therefore, he deserves, not only our sympathy, but our intelligent benevolence as well.

34 Washington Street.

